

## PATENT COOPERATION TREATY

## PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference <b>X-16327</b>	<b>FOR FURTHER ACTION</b> see Form PCT/ISA/220 as well as, where applicable, Item 5 below.	
International application No. <b>PCT/US2004/032304</b>	International filing date (day/month/year) <b>15/10/2004</b>	(Earliest) Priority Date (day/month/year) <b>16/10/2003</b>
Applicant  <b>ELI LILLY AND COMPANY</b>		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 4 sheets.



It is also accompanied by a copy of each prior art document cited in this report.

**1. Basis of the report**

- a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.



The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).



With regard to any nucleotide and/or amino acid sequence disclosed in the international application, see Box No. I.

**2.**

**Certain claims were found unsearchable** (See Box II).

**3.**

**Unity of invention is lacking** (see Box III).

**4. With regard to the title,**

the text is approved as submitted by the applicant.



the text has been established by this Authority to read as follows:

**5. With regard to the abstract,**

the text is approved as submitted by the applicant.



the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

**6. With regard to the drawings,**

- a. the figure of the drawings to be published with the abstract is Figure No. 2



as suggested by the applicant.



as selected by this Authority, because the applicant failed to suggest a figure.



as selected by this Authority, because this figure better characterizes the invention.



none of the figures is to be published with the abstract.

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US2004/032304

Box No. IV Text of the abstract (Continuation of Item 5 of the first sheet)

A guide and follower cooperate to promote a user moving the driver relative to the housing along a travel path that operates the apparatus. The cooperating elements of the nut and the driver are disengaged when the driver is disposed in a reset segment of the travel path, and the cooperating elements of the nut and the driver become engaged when the driver is shifted through a nut engaging segment of the travel path from the reset segment to a nut rotating segment of the travel path. The engagement of the cooperating elements of the nut and the driver cause the nut to screw proximally along the threaded shaft of the drive member when the driver is shifted through the nut rotating segment from the nut engaging segment to an injecting section of the travel path. When the driver is shifted through the injecting section from the nut rotating segment to the reset segment, the nut and the drive member are shifted in the distal direction to axially advance a fluid container piston to dispense medicine, and the cooperating elements of the nut and the driver become disengaged.

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/US2004/032304

A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 A61M5/315

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A61M

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	✓ WO 02/30495 A2 (ELI LILLY AND COMPANY; ROE, MICHAEL, JOSEPH) 18 April 2002 (2002-04-18) cited in the application abstract	1
A	✓ US 6 221 046 B1 (BURROUGHS ANDREW ET AL) 24 April 2001 (2001-04-24) cited in the application abstract	1
A	✓ WO 02/092153 A2 (ELI LILLY AND COMPANY; ATTERBURY, WILLIAM, GODWIN; DILLER, MARK, GERAR) 21 November 2002 (2002-11-21) abstract	1
A	✓ EP 0 554 996 A1 (BECTON DICKINSON AND COMPANY) 11 August 1993 (1993-08-11) abstract	1

☐ Further documents are listed in the continuation of box C☒ Patent family members are listed in annex.

## \* Special categories of cited documents:

\*A\* document defining the general state of the art which is not considered to be of particular relevance

\*E\* earlier document but published on or after the international filing date

\*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

\*O\* document referring to an oral disclosure, use, exhibition or other means

\*P\* document published prior to the international filing date but later than the priority date claimed

\*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

\*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

\*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

\*8\* document member of the same patent family

Date of the actual completion of the international search

1 February 2005

Date of mailing of the international search report

09/02/2005

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## INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US2004/032304

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
WO 0230495	A2	18-04-2002	AU	9258101 A	22-04-2002
			BR	0114498 A	13-01-2004
			CA	2424015 A1	18-04-2002
			CN	1468118 T	14-01-2004
			EA	4406 B1	29-04-2004
			EP	1326664 A2	16-07-2003
			JP	2004510554 T	08-04-2004
			MX	PA03002993 A	14-07-2003
			NO	20031044 A	06-03-2003
			PL	360881 A1	20-09-2004
			ZA	200301758 A	03-03-2004
US 6221046	B1	24-04-2001	AT	193833 T	15-06-2000
			AT	246528 T	15-08-2003
			AU	696439 B2	10-09-1998
			AU	4863796 A	23-09-1996
			CA	2213682 A1	12-09-1996
			CY	2179 A	23-08-2002
			DE	69608833 D1	20-07-2000
			DE	69608833 T2	30-11-2000
			DE	69629391 D1	11-09-2003
			DE	69629391 T2	09-06-2004
			DK	730876 T3	31-07-2000
			DK	879610 T3	24-11-2003
			EP	1304129 A2	23-04-2003
			EP	0730876 A2	11-09-1996
			EP	0879610 A2	25-11-1998
			ES	2147346 T3	01-09-2000
			ES	2203880 T3	16-04-2004
			GR	3034256 T3	29-12-2000
			IL	117319 A	28-03-2004
			JP	3568959 B2	22-09-2004
			JP	2002503116 T	29-01-2002
			JP	2004073889 A	11-03-2004
			NO	974073 A	28-10-1997
			NZ	302558 A	29-11-1999
			PT	730876 T	30-11-2000
			PT	879610 T	31-12-2003
			SI	730876 T1	31-12-2000
			SI	879610 T1	31-12-2003
			US	5938642 A	17-08-1999
			WO	9627400 A1	12-09-1996
			US	6001089 A	14-12-1999
			ZA	9601845 A	08-09-1997
WO 02092153	A2	21-11-2002	CA	2445511 A1	21-11-2002
			EP	1392377 A2	03-03-2004
			US	2004210199 A1	21-10-2004
EP 0554996	A1	11-08-1993	US	5279585 A	18-01-1994
			CA	2088110 A1	05-08-1993
			DE	69305376 D1	21-11-1996
			DE	69305376 T2	20-03-1997
			JP	1903543 C	08-02-1995
			JP	5337179 A	21-12-1993
			JP	6024599 B	06-04-1994